

# Work Order ID 62210

Wednesday, September 22, 2010 11:45:27 A

Page 1

Item ID: D3492-041

Accept

Setup Start

Revision ID:

Stop

Item Name: Plug Assembly

Start Date: 9/22/2010 Start Qty: 60.00

Cust Item ID:

Required Date: 9/29/2010 Req'd Qty: 60.00

Customer:

Reference:

Approvals:

Process Plan: M

Date: 10-9-22 Tooling:

Date:

QC:

Date: SPC (Y/N):

Date:

Run Start

Stop

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

Draw Nbr

Revision Nbr

D3492

Rev C

100

0.00



Hardinge CNC LATHE SMALL

Hardinge

Memo

0.00

Hardinge CNC Lathe Small

1-Turn as per Folio FA633 & Dwg D3492 □ Dwg Rev: C □ Folio  
Rev: C

SA 10/10/04

62 0

110

0.00



QC2- Inspect parts off machine FAI/FAIB

QC

Memo

0.00

Quality Control

SA 10/10/04

61 0

120

0.00



QC8- Inspect parts - second check

QC

Memo

0.00

Quality Control

A.A 10/10/04

61 0

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			



**NOTE:** Date & initial all entries




# Work Order ID 62210

Wednesday, September 22, 2010 11:45:27 A

Page 3

Item ID:	D3492-041	Accept		Setup	Start	
Revision ID:					Stop	
Item Name:	Plug Assembly					
Start Date:	9/22/2010	Start Qty: 60.00		Cust Item ID:		
Required Date:	9/29/2010	Req'd Qty: 60.00		Customer:		
Reference:						

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	
	QC:	Date:	SPC (Y/N):	Date:		Stop	

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160  Powdercoat Powder Coating	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum <i>M 115291</i>	0.00 <i>BR 10-10-14.</i>				<i>61</i>			
	Memo (Flat End Only) <input type="checkbox"/> START TIME: <i>10:10</i> <input type="checkbox"/> OVEN TEMPERATURE: <i>320°</i> <input type="checkbox"/> FINISH TIME: <i>10:40.</i>	0.00							
170  QC Quality Control	QC3- Inspect Part Finish	0.00 <i>=&gt; 90 10/10/11</i>				<i>61</i>	<i>9</i>		
	Memo	0.00							
180  Packaging Packaging	Identify as per dwg & Stock Location: <i>EP-B</i>	0.00 <i>BR 10-10-14</i>				<i>61</i>			
	Memo	0.00							

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			



**NOTE:** Date & initial all entries


**Work Order ID 62210**

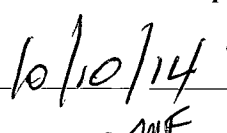
Wednesday, September 22, 2010 11:45:27 A

Page 4

Item ID: D3492-041 Accept  Setup Start   
Revision ID:  
Item Name: Plug Assembly Stop   
Start Date: 9/22/2010 Start Qty: 60.00  Cust Item ID:  
Required Date: 9/29/2010 Req'd Qty: 60.00  Customer:  
Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start   
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop 

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190  QC	QC21- Final Inspection - Work Order Release	0.00							
Quality Control	Memo	0.00							

10/10/14   
MF  
10-10-14

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



# Picklist Print

Wednesday, September 22, 2010 11:45:31 AM

Page 1

Work Order ID: 62210



Parent Item: D3492-041



Parent Item Name: Plug Assembly

Start Date: 9/22/2010

Required Date: 9/29/2010

Start Qty: 60.00

Required Qty: 60.00

Comments: IPP rev A 06.03.03 New Issue EC  
 IPP Rev:B 06-08-28 As per Rev B JLM  
 IPP Rev:C 07-12-06 Rev C dwg DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

M6061T6R0.625

Purchased

No

100

f

68.2600

0.0625

3.947368



*10/10/04*

6061-T6 Round Bar .625"

Location

Loc Qty

Loc Code

MAT

24

114415

24

MAT012

44.26

112697

10.5

113796

33.76

*112611*

*1 ft*

*2.6 ft*

*2.6 ft*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

<b>DART AEROSPACE LTD</b>		<b>Work Order:</b>	<i>62210</i>
<b>Description:</b> Plug		<b>Part Number:</b>	D3492-1
<b>Inspection Dwg:</b> D3492	<b>Rev:</b> C	<b>Page 1 of 1</b>	

### FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
0.060	+/-0.005	.063	/			
0.060	+/-0.005	.059	/			
Ø0.394	+/-0.010	Ø.394	/			
Ø0.625	+/-0.010	Ø.624	/			
0.090	+0.000/-0.002	.089	/			
0.500	+/-0.010	.500	/			
0.055	+0.000/-0.002	.054	/			
0.050 x 20°	+/-0.010	.050 x 20°	/			

<b>Measured by:</b>	<i>[Signature]</i>	<b>Audited by:</b>	<i>G.A</i>	<b>Prototype Approval:</b>	N/A
<b>Date:</b>	<i>10/10/04</i>	<b>Date:</b>	<i>10/10/04</i>	<b>Date:</b>	N/A

Rev	Date	Change	Revised by	Approved
A	06.06.02	New Issue P/O D3492-041	KJ/JLM	
B	06.10.16	Ø0.625 was Ø0.500	KJ/JLM	
C	07.11.23	Tolerances revised	KJ/EC/DD	
D	08.06.19	0.050 x 20° dimension added	KJ/DD	<i>[Signature]</i>

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

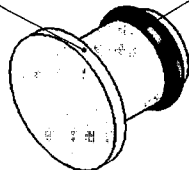
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NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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**NOTE:** Date & initial all entries

D3492-XX PLUG  
(SEE TABLE)

NAS1611 PLUG  
(SEE TABLE)



SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. *62210*  
*BS 10-9-22*

**D3492-XXX PLUG PARTS LIST**

QTY -041	QTY -043	QTY -045	QTY -047	QTY -049	QTY -051	QTY -053	PART NUMBER	DESCRIPTION
X							D3492-041	PLUG ASSEMBLY
	X						D3492-043	PLUG ASSEMBLY
		X					D3492-045	PLUG ASSEMBLY
			X				D3492-047	PLUG ASSEMBLY
				X			D3492-049	PLUG ASSEMBLY
					X		D3492-051	PLUG ASSEMBLY
						X	D3492-053	PLUG ASSEMBLY
1							D3492-1	PLUG
	1						D3492-3	PLUG
		1					D3492-5	PLUG
			1				D3492-7	PLUG
				1			D3492-9	PLUG
					1		D3492-11	PLUG
						1	D3492-13	PLUG
		1					NAS1611-005	O-RING
			1				NAS1611-007	O-RING
1							NAS1611-010	O-RING
						1	NAS1611-012	O-RING
	1						NAS1611-013	O-RING
					1		NAS1611-015	O-RING
						1	NAS1611-016	O-RING

△ C △ C △ C

**NOTES:**

1) O-RING: POSSIBLE SUPPLIER P/N: NAS1611-XXX OR PARKER 2-XXX

~~UNDER REVIEW~~  
*OK ASS 08.11.12*

DEO ATTACHED

RELEASED  
*5-1-16*

C	ADD -049/-051/-053, CHANGE DRAWING FORMAT	PH	07.10.05
B	ADD -047; UPDATE DIM A FOR -045	PH	06.05.11
A	NEW ISSUE	PH	06.01.04
REV.	DESCRIPTION	BY	DATE
DESIGN	<i>AL</i>	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA DRAWING NO. <b>D3492</b> REV. C SHEET 1 OF 2 TITLE <b>PLUG</b> SCALE 2:1 COPYRIGHT © 2007 BY DART AEROSPACE LTD <small>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	
DRAWN	<i>AL</i>		
CHECKED	<i>JP</i>		
MFG. APPR.	<i>JP</i>		
APPROVED	<i>JP</i>		
DE APPR.	<i>JP</i>		
DATE	07.10.05		

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

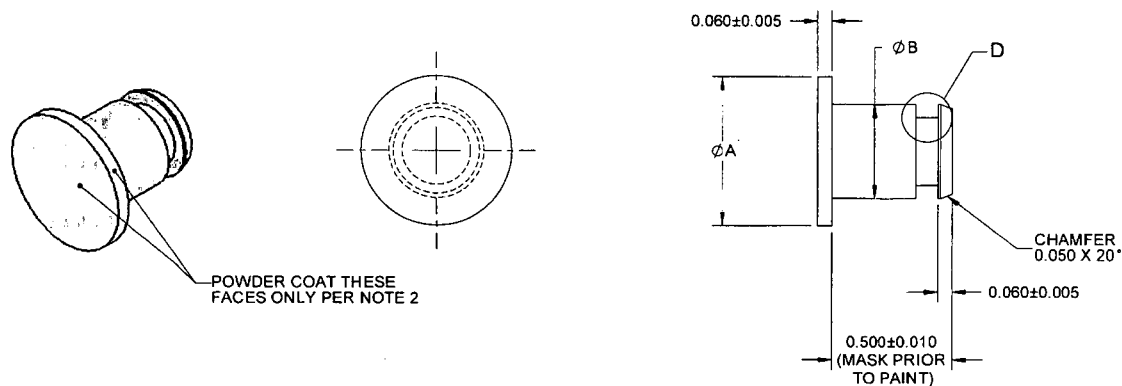
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

8 7 6 5 4 3 2 1



**D3492-XX PLUG**

**D3492-XX PLUG MACHINING DETAILS**

P/N	A	B	C	MATERIAL SPEC
D3492-1	0.625	0.394	0.055	M6061T6R0.625
D3492-3	0.750	0.582	0.045	M6061T6R0.750
D3492-5	0.375	0.188	0.045	M6061T6R0.375
D3492-7	0.500	0.270	0.045	M6061T6R0.500
D3492-9	0.938	0.750	0.045	M6061T6R1.000
D3492-11	0.850	0.664	0.045	M6061T6R0.875
D3492-13	0.750	0.520	0.045	M6061T6R0.750

**NOTES:**

- 1) MATERIAL: ALUMINUM 5052-H32 OR 6061-T6 OR 1100-0 PER QQ-A-225/7 (5052) OR QQ-A-225/8 (6061) OR QQ-A-200/8 (6061) OR QQ-A-225/1 (1100) (REF. DART MATERIAL SPEC M6061T6R0.000)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1  
POWDER COAT WHITE GLOSS (4.3.5.1) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: N/A

*w/b 62210*

**UNDER REVIEW**  
01.03.11  
DEM. 10 ON D3492-13  
REF. 12 (HARVEY'S MALLER)  
11.08.11  
OK

**DEO ATTACHED**

**RELEASED**  
07.11.16

DESIGN		<b>DART AEROSPACE LTD</b>	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		D3492	SHEET 2 OF 2
APPROVED		TITLE	SCALE
DE APPR.		PLUG	4:1
DATE	07.10.05	COPYRIGHT © 2007 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD	

8 7 6 5 4 3 2 1

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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**NOTE:** Date & initial all entries



DRAWING NO. D3492	TITLE PLUG	REV. C	DART AEROSPACE LTD ENGINEERING ORDER		D.E.O. NO. D3492-C-1	SHEET NO. SHEET 1 OF 1	SCALE NTS
DRAWN AJS	CHECKED	MFG. APPR. <i>B</i>	APPROVED <i>MP</i>	DE APPR. <i>MP</i>			
DATE 08.11.05	DATE 08.11.05	DATE 08.11.05	DATE 08/11/05	DATE 08/11/05			

SHEET 2 MODIFY -13 PLUG AS SHOWN:

IS:

**D3492-XX PLUG MACHINING DETAILS**

P/N	A	B	C	MATERIAL SPEC
D3492-13	0.750	0.510	0.045	M6061T6R0.750

*w/o 42210*

WAS:

**D3492-XX PLUG MACHINING DETAILS**

P/N	A	B	C	MATERIAL SPEC
D3492-13	0.750	0.520	0.045	M6061T6R0.750

**RELEASED**  
*08/11/10*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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